



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 08/982,559 | 12/02/1997 | JOHN CAHILL | NSP-CASE-5 | 9469 |

7590

04/22/2003

FLYNN THIEL BOUTELL & TANIS
2026 RAMBLING ROAD
KALAMAZOO, MI 49008

EXAMINER

GUARRIELLO, JOHN J

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 04/22/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-26

Office Action Summary

Application No.

08/98239

Applicant(s)

Cahill

Examiner

John Guarnello

Group Art Unit

1971

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for ReplyA SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 2/5/2003
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 23, 2-8, 10, 15-25, 27-45 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 23, 2-8, 10, 15-25, 27-45 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Art Unit: 1771

DETAILED ACTION

15. The Examiner acknowledges paper # 25, the amendment of 2/5/2003.
16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
17. Applicant's arguments regarding Kelch under 102(b) and the rejection is withdrawn.

Claim Rejections - 35 USC § 102

18. Claims 23, 3-8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Minnick 5,098,778.

Rejection is maintained substantially as in paper # 15 of 2/14/2001, and in paper # 17 of 8/14/2001, and paper # 22 of 6/6/2002 with exceptions noted below with '451 Minnick in paragraph # 2⁰~~1~~ regarding claims 2, 15-22.

Applicant's arguments regarding the wall structure have been considered but Minnick '778 describes building panels which can be considered wall structure as noted, (column 2, lines 54-58). Furthermore, Minnick '778 still describes light weight, high strength laminates (column 7, lines 54-60) with a

Art Unit: 1771

low density, 0.7 lb./cu.ft. (Column 8, lines 62-63). Minnick '778 describes the laminate has high strength of at least 9.9 Mpsi, flex strength, and specific strength values of 0.8(L) and 2.5(C) in (Table II, Example I), (column 9, lines 34-60). Since, Minnick '778 teaches each of the chemical and structural elements claimed, then it must meet the mechanical strength inherently.

Minnick '778 meets the essential limitations of the claimed invention. Claims lack novelty.

Applicant's arguments regarding woven is not disclosed, have been considered but a fiberglass scrim can be considered woven, thus applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

20. Claims 23, 2, 15-22, 24, 25, 27-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelch in view of Minnick 5,451,451.

Kelch as in the text in paper # 24 of 12.4/2002, with the difference that it is silent about the cellulosic layer laminated to the reinforcing layer.

Minnick '451 describes lightweight high strength laminate, (see abstract; column 2, lines 47-68; column 4, lines 5-36). Minnick '451 describes the cellulosic layer "in another aspect of the invention" (column 7, lines 59-60) which corresponds to the cellulosic layer which is laminated to the reinforcing layer. Minnick '451 describes resin is impregnated into cotton linter paper (which is cellulose), (column 7, lines 59-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the cellulosic layer of Minnick '451 in the panel board of Kelch motivated with the expectation that the resin impregnated layer (as the third layer for the foam board) would improve the properties of strength of the foam insulation board so as to withstand the problem of high velocity winds as noted in Kelch, (column 1, lines 23-25).

Art Unit: 1771

Applicant's arguments regarding the combination of Minnick and Kelch have been considered but they are not persuasive because placing a layer of Minnick with Kelch would improve the laminate strength of the claimed wall structure which is a motivation contrary to what applicant argues. No criticality of components is evidenced by applicant with regard to wind velocity to the claimed wall laminate.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is 703-308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-305-5408.

Art Unit: 1771


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John J. Guarriello:gj

Patent Examiner

April 11, 2003



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700